Muclear Mivision New's



A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 8/No. 25 December 22, 1977

A kid's eye view. . .

Christmas, Chanukah: what's it all about?



HOLIDAY WISHES—from children of Nuclear Division employees at Glenwood School, Oak Ridge. They are Arlene Zeigler's third-graders. Left to right, front row: Jamie Oran and Kevin Kerley; second row: Lara McCarthy, Lance Peak, Lisa Smith, Alex Rigopoulas and Mike Dunthorne; third row: Doug Bland, Nancy Dickert, Monica Moore, Eric Purnell, Kei Jujimura and Jimmy Minniard. (Michelle Cristy is not pictured.)

Christmas means being with my family, seeing my aunts, uncles, and my little cousin that lives out of town. It means buying presents and hiding them, playing Christmas records, and seeing my little brother's eyes light up at the decorated Christmas tree. Christmas means celebrating the birth of Christ.

(Dawn's father, George K. Hardman, works at the Paducah plant.)



Dawn Corey



Christmas is a time to show somebody you love them by giving them a gift.

It's like in the morning when you wake up and open presents, and you just have so many to open you just can't stand it!

(James' mother, Brenda Bayless, works at ORGDP.)

ames

'you just have so many to open, you just can't stand it!"

To me Christmas is a day full of happiness and excitement. I'd really be excited if I find toys under my Christmas tree. Christmas also means the birthday of Jesus when the three Wise Men gave the Baby gifts. I'm glad there is a Christmas. jorey

(Corey's father, Joe L. Williams, is a Paducah employee.)

Children of Nuclear Division employees were asked to write on "What Christmas or Hanakuh means to me." Their responses ranged from the religious: "Hanakuh reminds me of the Macabees and the war with the Syrians," and "Christmas is when Jesus was born" to the nonsectarian: Santa Claus, dradle tops, reindeer, presents and parties.

Some listed favorite holiday foods such as: strudles, schnitzels, candy, potato latkes and other nameless goodies. Almost every essay expressed the season's true spirit in terms of love, families, fun and, as one little lady put it: "the joy of giving and the joy of getting."

We tapped children to typify the holiday spirit because as Charles Dickens said:

"Christmas is a time for children. Why can't we all be more childlike at Christmas time?"

A season 'when I can stay home with my family. I can talk with them, laugh with them and do all kinds of things with them.'

*** ***

Christmas means being thankful for all the food and presents that I get. I'm going to New York to have Christmas with my mother. We are also going to Rockefeller Center to see a program, and to see the big Christmas tree on Fifth

Chanukah means to me candles and fun and toys and parties. Dradle tops, too! Ronnie (Ron's father, Edward

Oblow, works at ORNL.)



Ron Oblow, age 7, lights the menorah

Y-12's Jim Beavers named young engineer of year

James E. Beavers, Manager of the Structural and Architectural Engineering Department at the Oak Ridge Y-12 Plant, has been selected as Young Engineer of the Year by the National Society of Professional Engineers (NSPE). Beavers will receive the award at the Society's annual meeting, January 25, in New Orleans.

Criteria for selection for the award include scholastic achievements, professional and technical society activities, engineering experience, accomplishments, and civic and humanitarian activities.

Beavers has been with Union Carbide since 1968. His responsibilities include technical management of four design groups, responsibility for all structural analysis and design problems within the Y-12 Plant, as well as other programs at the ORNL and ORGDP.

A native of Center, Mo., Beavers received his bachelor's degree from the University of Missouri at Rolla, and his M.S. and Ph.D. degrees in civil and structural engineering from Vanderbilt University.

Prior to joining Union Carbide he was associated with the Kansas State Highway Department. While serving

with the U.S. Army Corps of Engineers, he was awarded the Army Commendation Medal for his research efforts at the Waterways Experiment Station at Vicksburg, Miss.

He has been an active member of NSPE and is president-elect of the Oak Ridge Chapter. He is also a member of the planning committee for NSPE's 1979 annual meeting to be held in Knoxville.

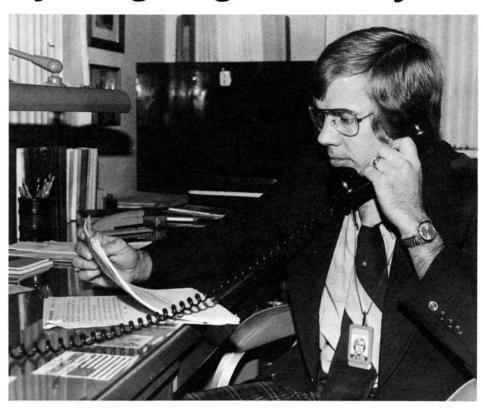
Among his many memberships are the American Society of Civil Engineers, American Concrete Institute, Earthquake Engineering Research Institute, Seismological Society of America, American Association for the Advancement of Science, International Association of Shell Structures and the American Society of Engineering Education.

Beavers, his wife, Beverly, and his two sons live at Route 22, Beaver Ridge Road, Knoxville.

Involved in civic activities, Beavers is on the board of directors of the Karns Lions Club, a member of the National Trust for Historic Preservation, and has served as volunteer consultant to the Oak Ridge Mental Health Facility.



FINAL TOUCHES—Becky Parks, Personnel Records, puts the final touches on the Christmas tree in the lobby of the administration building in Y-12. The blue and red decorations add that needed holiday festive touch to the reception area.



anniversaries

ORGDP

30 YEARS

Raymond W. Wolfenbarger, Utilities Operations.

25 YEARS

Melvin T. Warwick Jr. 20 YEARS

David W. Murrah and Madie G. Gallaher.

Y-12 PLANT

25 YEARS

Mary J. Goss, Herbert A. Pohto, Emmett J. Walker, Roy K. Holbert, James C. Parton, Edward D. Allen, Oden N. Copenhaver and Elbert K. Cochran.

20 YEARS

Horace M. Russell, William H. Rollen Jr., Harold E. Doughty and Jim C. Oody.

**

Insurance break coming in 1978

There is good news for the more than 15,000 Nuclear Division employees and early retirees who are participating in the Supplemental Life Insurance Program.

As a result of favorable experience, no payment for Supplemental Life Insurance will be required of those currently participating during the first three months of 1978 (13 weeks if you are paid weekly). Therefore, if you are participating as of December 31, your next payroll deduction or premium payment for Supplemental Insurance will be in April, 1978.

**

Long weekend set for New Year's Day

Monday, January 2, is an official holiday for Nuclear Division employees. We will celebrate New Year's Day a little late in 1978. No employee will be required to work unless his/her presence is required by security or continuous operations.

PADUCAH

30 YEARS

Claud Notgrass Jr., Process Maintenance.

25 YEARS

Rob M. Wilson, Vernon C. Douglas, Betty M. Brown, James F. Goodman, William J. Arnzen, Charles W. Edwards, Juell W. Thompson, James C. McDaniel, Emmitt V. Jackson Jr., James E. Kelley, Herbert E. Vied, John E. Ross, Millard H. Cloyd, Eugene A. Waggoner, Tommy H. Watson and Harold A. Wetton.

ORNL

25 YEARS

Joe H. Bratten, Ivy L. Miller, Billy A. Tye, Jack W. Forseman, David G. Thomas and William J. McDowell.

20 YEARS

Jack H. Moneyhun, Edward T. Arakawa and William O. Williams.

Nuclear Division News

UNION CARBIDE CORPORATION NUCLEAR DIVISION Office Post Office Box Y Oak Ridge, Tenn. 37830

EDITOR

James A. Young, Ext. 3-7100

ASSOCIATE EDITOR Karen L. Cromer, Ext. 3-6266

ORGDP Doug Carter, Ext. 3-3434

PADUCAH Darlene MacPherson, Bell 208

> Member, INTERNATIONAL ASSOCIATION OF BUSINESS

COMMUNICATORS



question box

If you have questions on company policy, write the Editor, Nuclear Division News (or telephone your question in, either to the editor, or to your plant contact). Space limitations may require some editing, but pertinent subject matter will not be omitted. Your name will not be used, and you will be given a personal answer if you so desire.

Gifts to boss

QUESTION: What is the Company policy on giving gifts to superiors?

ANSWER: The exchange of gifts of relatively low monetary value on a purely personal basis is acceptable. However, any gifts that would appear to or would, in fact, enhance an employee's treatment on the job by his/her supervisor should not be given or accepted.

Dance locations

QUESTION: With ORGDP's population now exceeding 6,300, it seems unfair to limit the annual dance to only 500 persons. Considering the number who live in Knoxville, could not a larger facility be reserved so more people could attend?

ANSWER: Company-sponsored events are provided to accommodate as many employees as possible. This year's ORGDP annual dance, which was held at the Oak Ridge Civic Center, was limited to 600 persons to avoid overcrowding and to provide for greater safety. Actually there were tickets left over—only 590 being sold.

If a larger number would be interested in attending this affair, ORGDP will consider looking for a larger facility for the function and/or having two dances.

First aid training

QUESTION: Reference is made to the Fall 1977 issue of Family Safety. Why isn't more first aid for choking (Heimlich Method), severe bleeding, burns, heart attacks given on the job?

ANSWER: First aid training is an important element of the training program given to emergency squad members and other employees involved in emergency care. These employees receive in-depth training in basic first aid, cardiopulmonary resuscitation, and the Heimlich maneuver. While it is not practical to give in-depth training to all employees, film libraries at each installation have introductory films on the Heimlich maneuver and cardiopulmonary resuscitation, and we do plan on using these at safety meetings. Information concerning formal training may be obtained from the American Red Cross (Oak Ridge phone number 483-5641) or the East Tennessee Heart Association (Knoxville phone number 546-8681).

Job opportunity system

QUESTION: Is the Job Opportunity System unique to the Nuclear Division, or is it Corporate wide? Who was responsible for developing it?

ANSWER: Although there was some spotty application of bidding systems for nonexempt salaried employees at some UCC locations, the Nuclear Division was the first in the Corporation to introduce a broad-scale Job Opportunity System throughout the entire Division. More recently a similar, though not identical, system has been installed in the New York office at 270 Park Avenue.

Our system was developed after a request by R. F. Hibbs to seek a better method of providing notification of opportunities for advancement for nonexempt salaried employees in each of the installations of the Nuclear Division. There was input from each of the installations and a search was made of similar procedures used by other companies. The findings were adapted to the needs and desires of the Nuclear Division and its employees. The resultant Job Opportunity System has been reviewed regularly and modified as needed. Another review is presently going on.

'Merits' discussion

QUESTION: Is it Union Carbide policy for a supervisor to discuss one secretary's merits with another secretary—then use her opinions in evaluation? If not, then what recourse does one have when this has happened?

ANSWER: There is no Company policy concerning the discussion of one secretary's work performance with another secretary. In most cases, this would not be appropriate—especially if the secretaries are peers. There are a few cases where such discussions would be appropriate and productive; i.e., a Division Superintendent/Director discussing certain aspects of a Department secretary's appraisal with his/her secretary.

If you feel an inappropriate discussion has occurred, you should express your concerns to your supervisor.



safety scoreboard

Time worked without a lost-time accident through December 15:

Paducah	145 Days	1,922,800 Man-Hours
ORGDP		543,200 Man-Hours
Y-12 Plant		9,472,000 Man-Hours
ORNL		5,107,044 Man-Hours

Napkin rings offered by new Junior Achievement chapter



SHARE IN ACHIEVEMENT—Roger F. Hibbs, President of the Nuclear Division, purchases a share of stock in Junior Achievement from Tammy Ross. The Nuclear Division-sponsored chapter is called Brass Wood Originals, and is currently selling napkin rings fashioned from brass, polished and lacquered. Ross is the daughter of Harley H. Ross, ORNL's Analytical Chemistry Division.

"Learn by doing" is the theory behind Junior Achievement. The new project now in progress by the Nuclear Division-sponsored chapter of Brass Wood Originals involves the manufacture of brass napkin rings.

Tammy Ross, the newly-elected president, recently sold a share of stock to Roger F. Hibbs, President of the Nuclear Division. She is the daughter of Harley H. Ross, ORNL's Analytical Chemistry Division. The Rosses live at 195 LaSalle Road, Oak Ridge.

Nuclear Division councilors for the student group are Bill Simon, Operations Division at ORGDP; Dave Davis, Telephone Service Department; Gary Riser, General Accounting; and Norm Sparks,

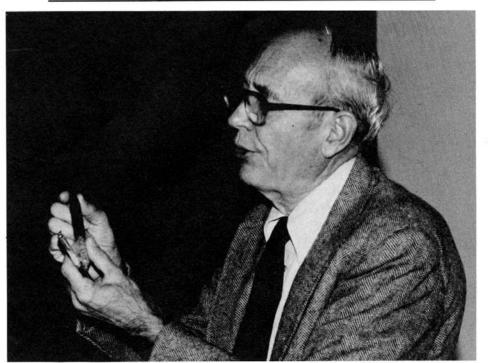
Payroll Department. J. K. Denton, Nuclear Division finance manager, is advisor to the chapter.

Brass Wood's first project is the manufacture and sale of napkins rings, cut from solid brass, de-burred, polished and lacquered. Two-to-the-box, the items sell for \$2.

Students involved in the project earn credit at the Oak Ridge High School in economic studies.

By buying a share in the Junior Achievement chapter, the purchaser risks his/her investment, the same as if a purchase were made from the stock market. He also shares in the profits from the enterprise.

Junior Achievement is a national organization with chapters all over the country, usually sponsored by local businesses.



During one of two Lind lectures, Ellison H. Taylor, Chemistry Division at ORNL, demonstrates how a normally transparent crystal of potassium bromide is colored blue when exposed to gamma rays. His lectures given at the American Museum of Atomic Energy concerned "Some Simple-Minded Ways to Study Chemical Reactions."

'A season *everyone* likes!'

(Continued from page 1)

Christmas is a holiday that everyone likes. It is a time to give presents with loving care. Christmas is when Jesus was born.

Lance

(Lance's father, Jim Peak, works at ORGDP.)

Christmas means to me happiness and joy and love. Christmas means to me snowflakes falling on the ground.

Monica

(Monica's father, MacArthur Moore, is a Y-12 employee.)

Christmas means to me about happiness. It also means about Jesus. Christmas is a lot of things.

My mom buys Mary, Joseph, and Jesus in the manger. But this Christmas there weren't any to buy. Christmas is fun because we play in the snow.

The End.

(Kei's father, Robert Fujimura, works at Y-12.)

'Christmas carols such as: "Rudolph" and "Thirty-two Feet and Eight Little Tails."



Tasha Shultz

I think Christmas is nice because of Jesus being born. I like Christmas carols, such as: "Rudolph," "Frosty the Snowman," "Jolly All Saint Nicholas," "Thirty-two Feet and Eight Little Tails, "Silent Night."

I like all the good food being cooked, good wishes, nice company, candy and gifts, and best of all-Santa Claus!

Taska

(Tasha Shultz's father, Kurt B. W. Nieuwenhuis, works at PGDP.)

It is a time to remember lesus' birthday. We put up a tree and put presents under it. Christmas means to have fun, open gifts and eat big dinners. And a time to be very, very good. I wish Christmas came three times a year.

nanc

(Shane's father, Charles E. Cornwell, is a PGDP employee.)

Hanakah reminds me of the Macabees and the war with the Syrians. Hanukah reminds me of the miracle of the oil. Hanukah reminds me of happiness. Hanukah is one of my favorite holidays. I get a lot of presents and some money. Hanukah means I get to light the Shamos candle.

I think Hanukah is a very nice holiday. On Hanukah I get to eat potato latkes with apple sauce and sour cream. On Hanukah I get to say the blessing for the candles.

HNDY

(Andy's father, Subramanian Raman, works at ORNL.)

**

I like when Jesus was born. I like when it's Jesus' birthday. And I like to open the presents.

Mary Jo

(Mary Jo's father, Joe L. Hayden, works at PGDP.)

Christmas means that you have a chance to share and love a lot of people. And to be nice and to buy toys for your friends and family. And to get some toys and to get some from Santa—if you are good.

Kevin

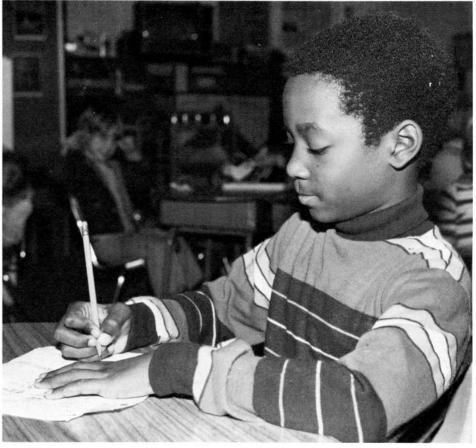
(Kevin's father, Marvin Kerley, works at ORGDP.)

'toys—if you are good.'

Christmas means that Jesus was born. It's in the Bible. It show love by giving presents. gives you time to be with your

Everybody should have a good time. Being with your family is fun!

(Lara's parents, John and Nancy McCarthy, are both UT loanees to ORNL's Biology Division.)



Eric Purnell writes Christmas prose

Christmas means love when everyone gives gifts to each other like watches, shoes, socks, ties, and pocketbooks. You get up Christmas morning, December 25; we take pictures of my gifts and my brother's gifts, too!

(Eric's mother, Sheila Purnell, works at Y-12; his father, John, at ORGDP.)

Christmas means the joy of giving, and the joy of getting. Christmas means snow flakes falling gently to the ground. It means the fun of decorating the tree.

Christmas means the beauty of the sparklers and candles on the tree. Christmas means tinsel sparkling on the tree. It means the delicious strudles and yummy schnitzels. Christmas means joy.

Michelle

(Michelle's father, Mark Cristy, is an ORNL employee.)

Christmas is a time when we We decorate a tree to put presents under.

Mother bakes lots of goodies to eat. We put stockings over the fireplace for Santa to put presents in.

(Doug's father, William Bland, works at Y-12).

Christmas is a time that you give and get presents. It's also a time when lots of families get together. Nancy

(Nancy's father, Ron Dickert, works at Y-12.)

'Hanukah reminds me of the miracle of the oil. . . of happiness.'

Christmas is a time for giving. Christmas is when I can stay home with my family. I can talk with them, laugh with them and do all kinds of things with them. Christmas is a season everyone likes!

(Mike's father, David Dunthorn, consults at ORGDP.)

Carbide Bowling Mixed Tournament

The All Carbide Mixed Bowling tournament will be held the last three weekends in February at the Tri-County Lanes, Oliver Springs. The dates are February 11-12, 18-19, and

All Union Carbide employees, retirees and spouses, and ORAU employees and spouses are eligible to participate in the handicap league.

Entry forms can be obtained from league secretaries or from the Recreation Office, Building 9711-5,

The deadline for entering the tournament is January 20. Additional information can be obtained by calling extension 3-5833.

Four ORNL promotions





Cotter

Dew





Prewitt

Notice to potential summer employees

College-aged persons looking for summer jobs should be aware that three ORNL summer employment programs have January application deadlines: 1. ORAU Student Research Participation Program, January 9 deadline, for persons who have completed their junior year in college; 2. ORNL Summer Research Program, January 16 deadline, for college graduates and graduate students; 3. ORAU Faculty Participation Program, January 9 application deadline.

For applications contact the ORNL Employee Relations Division.

Camera Club 'Cinema Group'

The Carbide Camera Club plans to form a "Cinema Group," open to employees interested in movie making techniques. Interested persons should contact Carlos E. Bamberger, 3-6027, or Hal G. Smith, 3-

The club is open to all Union Carbide employees, their spouses

Four promotions have been announced at ORNL: in the Operations Division, Jerry L. Cotter and John M. Guinn have been named reactor supervisors; and in Plant and Equipment, Murrel R. "Randy" Dew has been promoted to maintenance supervisor, and J. William Prewitt has been appointed a shops supervisor.

Cotter, a Knoxville native, worked one year for the Tennessee Department of Transportation before joining Union Carbide in 1974 as a reactor controller. He went to Hiwassee College in Madisonville, Tennessee.

Cotter and his wife, Sherri, an employee in the Health and Safety Research Division, live in Knoxville.

A Carbide employee since 1974, Dew has worked as a plannerestimator and a carpenter in P&E. He was a self-employed contractor before joining the Nuclear Division. At Roane State's evening school, he has taken courses in management and supervision.

He and his wife, Lynda, live in Norris. They have three children: Steve, Valerie and Susan.

Guinn worked in the Laboratory Protection Division from 1948 to 1951, then spent 13 months in Korea in the service before rejoining the Nuclear Division in 1954 as a reactor controller. He has worked for the Alcoa Aluminum Co. and the McMinn County sheriff's office.

Guinn and his wife, Bonnie, live in Kingston. They have four children: Barbara, Carolyn, John Marcus III and

A Carbide veteran since 1944 Prewitt worked in the ORNL Mail Room before joining the P&E Division in 1947 as a machinist apprentice. He also served as a machinist for 14 years and as a planner-estimator from 1966-1977. A World War II veteran, Prewitt has spent most of his years in the Oak Ridge-Clinton area. He has taken courses in UT's evening school program.

He and his wife, Helen, have two children, Marvin and Joy. They live in Lake City.

and children. Annual dues are \$3, plus \$1 for each additional family member. Meetings are the second Tuesday of each month at 7:30 p.m., Cheyenne Hall, Oak Ridge. Dark room facilities are located there. For more information concerning the Carbide Camera Club, contact John Blankenship, president, at extension

3-3533. RIDE or JOIN CAR POOL from Lakebrook Boulevard and West Hill Village area, West Knoxville, to any portal, straight days. Guven Yalcintas,

CAR POOL MEMBERS from areas of West Outer, Waddell, Pennsylvania or Hillside, Oak Ridge, to East Portal, 8:15-4:45. Tom Burnett, plant phone 3-6939, home phone 483-



W. G. "Bug" Tatum, chemical technician, Operations Division at ORNL, double checks the power source for this Christmas tree located in Building 3047. This thermo-electric generator called "SNAP-7B" (Systems for Nuclear Auxiliary Power) uses Strontium 90 as its fuel source. The 12-volt system could power these Christmas lights for at least 50 years non-stop.

division death. . .

Raymond D. Phelps, Y-12's Machine Maintenance, died December 1 in the Oak Ridge Hospital. A native of Warren, Ohio, he joined Union Carbide in 1968, after employment with Van Huffel Corporation and Auto Supply and Service Company.

He is survived by his wife, Zala C. Phelps, Route 3, Oliver Springs; his mother, Clara Burson; stepmother, Dorothy Phelps: son, Raymond D. Smith; daughters,



Mr. Phelps

Rae Ann Sendledecker; Patricia Sharp a stepdaughter, Fostina Williams; stepson, Ronald Rutherford, and a brother, Richard.

Funeral services were held at the Carl Hall Funeral Home, Warren, Ohio, with burial in the Braceville Cemetery.

George G. Everett, a machinist in Y-12's Maintenance Division, died December 2 at the Oak Ridge Hospital. A native of Niota, he joined

Union Carbide in 1950 after working with Howell Nurseries, Tennessee Eastman Corporation and the Tennessee Valley Authority.

He is survived by his wife, Dorothy Everett, Route 2, Harrimam; a son, Albert; daughters, Alice Bryson, Peggy Pennington, Sue Taliaferro and Kim Everett; and four grandchildren.



Funeral services were held at Sharp's Funeral Home, with burial in the Oak Ridge Memorial Park.

Paul W. Hurst Sr., a machine operator at ORGDP, died in Knoxville November 22. A native of Blount County, he had worked with Union

Carbide since 1944 Survivors include two sons, Paul W. Jr. and Alan; a daughter, Vancy Stinette; brothers Jerry, Gordon and Ray; and a sister, Mrs. Hugh Carpenter.



Services were held at the Smoky View Baptist Church, with burial in Sherwood Memorial Gardens.

wanted...

ORNL

JOIN CAR POOL with nonsmokers from area of Burnham Woods, Fairview Apartments or Wilderness Trace, Oak Ridge, to East Portal, 8-4:30. John Alexander, plant phone 3-1967, home phone 482-5359.

RIDE or JOIN CAR POOL from Tabor Road, Oak Ridge, to East Portal, 8-4:30. Frances East, plant phone 3-1844, home phone 483-1677.

olant phone 3-1368, home phone 584 2411.

RIDERS WANTED from West Haven and Bearden areas, Knoxville, to West or North portal or 6000 area, 8-4:30. Don Williamson, plant phone 3-1152, home phone 525-1827.

Carbide bowling. . .

Classic League. . .

The Splinters hold a four point lead over the Eightballs in the Classic League. Dave Foster had the high scratch game of the week with 230. The Rojo's won the high team game handicap rolling a 1013.

Y-12 Mixed. . .

The Friskies hold only a one and one-half point lead over the Roll-Aids and Bits & Pieces in the Y-12 Mixed League. Alice Forseman and Martha Britt rolled the high scratch games with 216 and 217.

K-25 Tuesday...

The Fearless 5 are still second behind the City Slickers. It looks like they will not catch them this half of the season. C. R. Williams and M. N. Strickland rolled a 235 scratch game each to tie for the high this week. W. J. Redmond also rolled a 576 for the high scratch series.

K-25 Wednesday. . .

As of December 7, the Planners and Sues Sooners are tied for first position. Colin Bullen rolled the high scratch game with a 244! Charley Hale and R. D. Hughes both had a 615 scratch series.

Carbide Shifters. . .

The 3 Fuds & A Stilly continue to lead the Carbide Shifters over the 2 + 2. Sam Babb and Jackie McIntyre rolled the high scratch series with a 563 and 513 for the men and women.

ORGDP Women's. . .

The Uptowners are holding a small lead over the Out-Of-Towners this week in the ORGDP Women's League. Sue Davis rolled a 514 scratch series and Patrice Hayes had a 204 high scratch game.

ORNL A League. . .

It looks like the Dynamics control the ORNL "A" League this half leading by 17 points. Hodge, from the Dynamics, rolled the high scratch game with a 222. Akin, from the ORAU team, had a 636 handicap series.

ORNL C League. . .

The Alley Rads somehow moved into first place over the Remkeys and Damagers. The Remkeys had a 1,108 handicap game—998 scratch for the high this week.

ORNL Ladies. . .

The Mousechasers continue to lead the ORNL Ladies League over the Avengers by four points. Tillie Carden of the Avengers rolled a 203 scratch game, while Georgie Gwinn rolled a 550 scratch series for the Mousechasers.

Monday Mixed. . .

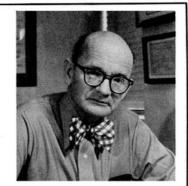
The Four Eagles continue in first place with the Roadrunners and Alley Cats tied for second. Doris Jackson bowled a 209 with 51 pins handicap to give her first place for women in handicap game. She also took handicap series with 627.





Capacity crowd at K-25 Christmas dance December 3

"White hat" for cholesterol?



by T. A. Lincoln, M.D.

(Editor's Note: Dr. Lincoln alternates his regular column with "Medicine Chest," where he answers questions from employees concerning health matters. Questions are handled in strict confidence, as they are handled in our "Question Box." Address your question to "Medicine Chest," Nuclear Division News, Building 9704-2, Mail Stop 20, or call the news editor in your plant.)

For the past 25 years, cholesterol has had only a "black hat" role to play in the tragic drama of coronary heart disease and premature death. It has clearly been one of the most important villains. New studies now show that a special portion of the serum cholesterol, the high density lipoprotein (HDL), probably has a protective effect against the development of this disease! Imagine! Cholesterol, a good guy in a "white hat!"

Numerous studies have shown that all men and women over 45 who have persistent elevations of serum cholesterol and triglyceride have an increased risk of eventually having a heart attack. This risk becomes much greater if these people also smoke and have high blood pressure. Other risk factors have been identified, but these three top most lists.

Fatty deposits in arteries

Although the mechanism by which atherosclerosis builds up fatty deposits in coronary and other large arteries is still incompletely understood, much is now known. Cholesterol and triglycerides are transported in the blood in combination with protein in chemical complexes called lipoproteins. The individual lipoproteins migrate at different rates in an electrical field because they are different in electrical charge, size and shape. This clinical laboratory procedure is known as lipoprotein electrophoresis.

When electrophoresis is performed, it is usually possible to identify low density lipoproteins (LDL), very low density lipoproteins (VLDL) and high density lipoproteins (HDL).

In the early stages of atherosclerosis, the LDL and VLDL accumulate in the inner surfaces of major arteries. They penetrate into the lining cells where they are precipitated by mucopolysaccharides, special sugarlike substances present in many tissues. Later smooth muscle cells derived from the next layer in the wall of the artery migrate in and bind the lipoproteins into what are called "foam cells." As years go by, more LDL and VLDL are deposited, and eventually the atherosclerotic process becomes severe enough to partially block an artery and predispose the victim to a heart attack.

Because of an eagerness to understand basic mechanisms, relatively little attention was paid to the "other" lipoprotein, the HDL. It was known that roughly 20 percent of the total serum cholesterol was HDL, but few appreciated its possible significance. In January, 1975, Drs. C. J. and N. E. Miller in England reported that the total body cholesterol pool increased when the proportion of HDL declined. They proposed that HDL facilitates the uptake of cholesterol from various tissues, including arterial walls, and its transport to the liver where it is broken down and excreted.

There had been several epidemiological studies which suggested that healthy men had higher HDL levels than those with coronary heart disease, but the Millers' work really caused a rush to look at population groups again. Dr. William Castelli and his associates at the National Institutes of Health looked at lipoprotein levels in almost 7,000 men and women aged 40 or over in Albany, N.Y.; Framingham, Mass.; Evans County, Ga.; Honolulu, Hawaii; and San Francisco, Calif. They found that HDL levels were lower in those with coronary heart disease than in those without.

Heart study

The Tromso Heart Study in Norway looked at HDL in relation to total serum cholesterol, age, and sex in about 1,500 individuals. They found that the higher the HDL, the lower the total cholesterol. They also found that women have a higher HDL/total cholesterol ratio than males. It begins at puberty but diminishes to about the same level as men at 40 to 49 years of age. Women rarely have heart attacks until after age 50, and this may be the reason why.

Dr. C. J. Glueck and associates at the University of Cincinnati looked at the relationship between lipoproteins, coronary heart disease and longevity in about 500 individuals. Based on their study, they hypothesized that a relatively low ratio of LDL to HDL may be related to prolonged longevity and a decreased incidence of heart attacks.

Much more work needs to be done, but it appears that individuals who have high levels of high density lipoproteins in their cholestrol have some protection against coronary heart disease. This protection seems to apply even when the total cholesterol is elevated. The crucial fact is not so much the total cholesterol but the proportion which is HDL.

retirements...



Marion S. Powell Process Maintenance Y-12 23 years service



David R. Baldwin Process Maintenance Y-12 29 years service



Roy L. Rollins ORGDP Maintenance 41 years service



Winfred O. Elam Fire and Guard Chief Y-12 32 years service



James M. Perry ORGDP Maintenance 32 years service



Leo J. Davis ORGDP Operations 33 years service



Barney D. Dixon ORGDP Operations 30 years service



Charles S. Asmanes Fabrication Engineering Y-12 32 years service



William E. Williams Jr. Administrator, Benefit Plans 36 years service



Henry W. Gibson ORGDP Maintenance 32 years service



Howard E. Reynolds U-235 Separation Department, ORGDP 31 years service



William E. Raby Y-12 Foundry 34 years service



Thomas P. Pride Y-12 Materials Forming 34 years service



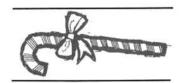
Kenneth A. McTeer Y-12 Electrical 25 years service



William M. Woods Chemical Technology ORNL 25 years service



Margaret T. Guess Biology Division ORNL 33 years service



Such findings might lead to a "stampede" for people who have high cholesterol levels to find out the proportion of LDL, VLDL and HDL.

No rush yet

Such a rush is not justified yet. The cost of lipoprotein electrophoresis is about \$20 to \$25. The Norwegians precipitated the VLDL and LDL out of the serum of their patients and then determined the cholesterol in what was left. Such a technique may be less expensive and possibly useful in future routine screening cholesterol determinations.

Ways to influence both the LDL-VLDL and HDL level will be the subject of a future news article.



Chester L. Oxford Finance & Materials 32 years service



W. Howard Montgomery Inspection Engineering ORNL 29 years service

next issue...

The next issue will be dated January 5. The deadline is December 27.

2 years service OF 29



'DON'T TELL A SINGLE soul what I'm gonna say. . . . This excited little boy typified the old song, "Listen, Dear Old Santa Claus," by leaving his secret wishes to the white-bearded old gentleman at the Paducah Plant's party for children recently. The children were entertained by a puppet show from the Reidland Baptist Church youth group and several animated cartoons at the Arcade Theater. Santa Claus was the featured finale as the children left the theater.

Wilma Dykeman to speak Jan. 19

Wilma Dykeman, columnist and author from Newport, Tenn., will be the guest speaker at the annual ladies night dinner of the Oak Ridge Section, American Society of Mechanical Engineers. She will speak Thursday, January 19, 7 p.m., at the new Oak Ridge Elk's Lodge. Her topic, "An Appalachian Visitor's Views of China," will cover her travels to the People's Republic with a group of American journalists designated "national leaders" by the president.

A graduate of Northwestern University, Dykeman holds several literary awards, has written more than 12 books, and is a syndicated feature columnist in the Sunday Knoxville News Sentinel.

Members of engineering societies are invited to attend. Cost for the dinner is \$13 per couple—for reservations with checks received by December 31—or \$15 per couple for reservations received January 1-14. Checks, made payable to ASME—Oak Ridge Section, should be sent either to Don Gray, Building K-1401, Mail Stop 385, or to Pete Holz, Building 9204-1, Mail Stop 9.

patents granted. . .

To Robert H. Dyer, Andrew H. Fowler, both of ORGDP; and Paul R. Vanstrum, Nuclear Division vice president, for "Method and Apparatus for Rapid Adjustment of Process Gas Inventory in Gaseous Diffusion Cascades."

To Domenic A. Canonico and Robert E. McDonald, both of ORNL, for "Means of Determining Extrusion Temperatures." 非本學

Fire cuttings slated for January

The next public firewood cuttings will be held on the Oak Ridge reservation January 13, 14, 27 and 28. Those interested in participating should meet in the parking lot on Bethel Valley Road, east of the main entrance to ORNL (across the street from the new Holifield Heavy Ion tower).

Participants must bring their own cutting equipment. Children under 14 years of age will not be allowed in the cutting area due to safety precautions. Cutting will be in designated areas, only.

For each cutting, a permit fee of \$5 per individual or family will be charged to cover costs of personnel needed to monitor the activity. For more information call Dennis Bradburn at 3-1266, or the Public Relations Department, 3-6421.

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Surplus sale set for January 18

Another surplus sale of used government-owned items is set for next month. Featured will be used office equipment and vehicles. Inspection may be made from 8:10 a.m. to 4 p.m. December 27, through January 17, including Saturdays, January 7 and 14.

The bids will be opened beginning at 9 a.m. January 18. The sales office is located in the Powerhouse Area, Building K-722, off State Route 58, Oak Ridge.

Additional information may be obtained from D. R. McCammon, extension 3-4601.

Coswer appointed to Synfuel post

The appointment of Kenneth E. Cowser as coordinator for the Life Sciences Synthetic Fuels Program at ORNL has been announced by Chester R. Richmond, associate director for biomedical and environmental sciences.

Cowser succeeds Carl W. Gehrs, who has returned to the Environmental Sciences Division to manage activities in the synthetic fuels area.

As program coordinator, Cowser will work with representatives from each of the divisions and will serve as a member of the Coal Technology Program's coordinating committee to assure that there is rapid exchange of information between developers of technology and life scientists.

Cowser was born in Chicago. He received his bachelor's degree in sanitary engineering from the University of Illinois, and a master's degree in industrial management from the University of Tennessee.

A registered professional engineer, Cowser also graduated from the Oak Ridge School of Reactor Technology. Prior to joining ORNL's former



Health Physics Division in 1953, he was a district engineer and acting regional engineer with the Illinois Department of Public Health.

Cowser has served on severalnational and international committees dealing with radioactive waste management and protection of man and the environment. He is a member of the Health Physics Society, Beta Gamma Sigma and Sigma Xi.

He and his wife, Nancy, live at 937 West Outer Drive, Oak Ridge. They have three children.

about people . . .





Ricci

Hahn

Enzo Ricci and Richard L. Hahn, both of ORNL, received the American Nuclear Socity's annual Radiation Industry Award for "an outstanding contribution to the application of radiation technology in industry." The scientists received a \$1,000 prize for their pioneering work in charged particle activation analysis.

Ricci is a research staff member in the Analytical Chemistry Division, and Hahn is section head for nuclear and transuranium element chemistry and director of the Transuranium Research Laboratory, Chemistry Division.

wanted...

Y-12

RIDER from vicinity of West Town via Kingston Pike to Cedar Bluff Road and Pellissippi Parkway, to any portal, straight day. Jim George, plant phone 3-7277, home phone Knoxville 693-6214.

ORNL

JOIN CAR POOL from Berkshire Boulevard and Broadacres, Powell, to West Portal, 8-4:30. Zee Trotter, plant phone 3-6434, home phone 947-6706.

RIDERS from Lonas Road, Hollywood Hills, Bearden area in Knoxville, to West or North Portals, 8-4:30. Don Williamson, plant phone 3-1152, home phone 525-1827.

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